## Chapter 185

# Northeast municipal economic dynamics and the democratic context: an analysis based on the Bolsa Família program and the electoral market

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### ABSTRACT

This article aimed to analyze the behavior of the northeastern municipal economic dynamics explained in the Gross Domestic Product (GDP) with the volume of the Bolsa Família Program (PBF) destined to each entity, the proportion obtained from the Votes by the Elected Mayor (VPE) in front of of the set of voters participating in the local election and the Party Coalition of the Mayor-Elect (CPPE) established or not with the state governor, based on per capita variables, in 2004, 2008, 2012 and 2016. Methodologically, the measurement of research results in the quantile regression model for panel data. The results showed that the GDP responded positively to the PBF and negatively in most municipalities to the VPE and the CPPE did not bring favorable impacts on the northeastern municipal economy.

**Keywords:** Economic Dynamics, Bolsa Familia, Electoral Market, Northeastern Cities.

## **1 INTRODUCTION**

Admitting the democratic aspect, for the sake of truth, advocates translating some symptomatic elements in Brazil, more particularly the Northeast region shows such minutiae, whose concern is to glimpse vestiges capable of establishing a political, economic, and social relationship, being the Bolsa Família Program (PBF) a prominent face of the social policy developed in the country.

The Bolsa Família Program, in turn, and the reading of Moraes and Machado (2017), points out that such governmental action constitutes one of the most important income transfer policies advocated by the governmental instance at the national level to economic agents, being a prerogative capable of to generate positive effects on overcoming poverty, in addition to enabling a context of federative articulation between the different Brazilian entities.

Rocha et al. (2018) show that Bolsa Família, as a rule, is the main income transfer mechanism, noting that it has greater impacts on a couple of items, namely: food consumption and housing. These generate asymmetrical reverberations, the first negatively and the second positively, reserving increases in domestic income for women providers of households.

Parallel to such contours, Miguel (2005) develops a kind of mapping of several theoretical models of democracy, emphasizing the importance of the aforementioned schools as explanatory contributions to the different democratic types currently spread around the world, in addition to specifying how comprehensive such theoretical elements conform to, being relevant to this study to highlight the Schumpeter/Dahl model associated with liberal-pluralism.

It is central to emphasize, however, that the authors combined in Miguel's text (2005) allow us to perceive the so-called electoral market as of significant importance in the understanding of political movements, since such behavior highlighted by the aforementioned perspective makes it possible to measure, at least approximately, the preferences of the electorate in the choice of policies expressed in the Bolsa Família restants, especially in the Northeast.

Thus, Schumpeter (1961) proposes that there be a competitive democracy, whose voters opt for the choice of representatives, a case that is quite common in different democracies, having as an interesting aspect predicted by the author the occurrence of persuasion of the leader or chosen group present in power in the face of the masses, making it possible to carry out traces of control of voters' preferences.

In addition to such notes, Mills (1981) develops an analysis f the centralization of power around the elites, which are located in leaders positioned in the great social, political, and economic institutions, accentuating asymmetrical relationships in society as distribution of power among the agents involved in the capitalist structure associated with the traits considered here.

Indeed, Miguel (2005), Lopreato (2007), and Bachrach and Baratz (2011), explicitly point out that the so-called agenda power is very important, that is, public policies must assume a certain position in terms of priority, whose perception by Schumpeter (1961) predict that the leader or group in power establishes the order of government actions, with such minutiae coming from the mentioned democratic model.

Dahl (2005) asserts that democratic regimes pass through a terrain whose extremes conform to closed hegemony and are opposed to polyarchy, where the transit to such ends of the spectrum advocates assuming greater or lesser popular participation in the governmental sphere, underlining theoretical nuances relevant to what is expected in the article.

A remaining signal, peculiarly, comes from the recovery of the idea of regional differentiation in the Brazilian Northeast, which reproduces a flagrant inter-spatial asymmetry, with more economically dynamic areas coexisting with relatively more backward ones, demonstrating a character capable of making democratic traits and the upheavals converge. on a regional scale, according to evidence from fiscal distinctions, at the municipal level, in studies by Silva (2009), Silva Filho et al. (2011), and Luna et al. (2017).

In this sense, the evidenced summary elements make it possible to highlight that the Brazilian northeastern municipalities, categorically, have different levels of economic dynamics, with factors such as the PBF and the preferences of the electorate (electoral market within the democratic model) as corollaries capable of explaining the pace of productive activity in the economy at the municipal level.

The hypothesis of the study emphasizes that the PBF generates favorable repercussions on the Gross Domestic Product (GDP) per capita in the spatial portion selected here and, conversely, the electoral market provides implausible restful effects on the northeastern municipal economic dynamics, reserving the fact of party coalitions, likewise, the reverberation of negative influences on GDP per capita in the entities considered.

The objectives of the research advocate analyzing the behavior of the northeastern municipal economic dynamics manifested in the GDP compared to the volume of the PBF destined to each entity, as well as the proportion obtained from the Votes by the Elected Mayor (VPE) before the set of voters participating in the election in the local and the Partisan Coalition of the Mayor-Elect (CPPE) that is established or not with the state governor, based on per capita variables in the years 2004, 2008, 2012 and 2016.

After all, this study is divided into 4 more sections besides the introduction. Next, some explanations of the democratic theory and its connection with the PBF regionally are developed; subsequently, the methodological procedures must be described; then the analysis of the results is detailed, reserving the last item to express the final considerations.

## 2 THEORETICAL CONSIDERATIONS ON DEMOCRACY AND THE IMPORTANCE OF BOLSA FAMÍLIA IN THE BRAZILIAN NORTHEAST REGIONAL PLAN

This section, as a rule, aims to present a summary overview of the main theoretical aspects of the idea of democracy, admitting a reading compatible with the perceptions of the Schumpeter/Dahl model, signaling that there are contours capable of linking such conceptual traits and the understanding of regional differentiation to that the Northeast is constituted, in addition to assuming the PBF as a significant element for reducing interspatial differences, based on deferences arising from the literature.

Initially, it is important to mention Bobbio (1986) as a theorist of the idea of democracy, whose central concern permeates the prerogative of asserting that democracy is associated with the liberal aspect, in other words, the structure of a democratic State corresponds to a relationship directly proportional to individual freedoms, being incompatible to combine non-democratic state traits and individual freedoms and vice versa.

In these circumstances, Miguel (2005) discusses, albeit briefly, the liberal-pluralist school consistent with the meeting of certain democratic aspects, in which Schumpeter presents in his theory the idea of manipulation of the masses through the elites (apathy of the masses before the elites ), as the majorities reveal quite changeable electoral preferences through the discourses socially perpetrated by political actors, clearly those who won the competitive electoral process.

Schumpeter's model (1961), among many aspects, makes it possible to glimpse in the so-called theory of the elites the ability of minorities to determine the political directions established in their own

decisions as choices of the elites in engendering typifications of policies, causing the masses to modify, in due course, their preferences according to the interests of the groups established in the Government.

Indeed, the aforementioned author seeks to demonstrate, at least partially, that the elites (leader or group invested with legitimate authority), according to the Weberian reading of Castelo Branco (2016), define government referrals from the point of view of the decision-making process, that is, decisions come from minorities and not from majorities, these being persuaded in their individual preferences and, therefore, reaching aggregate levels.

That said, Miguel (2005), Lopreato (2007), and Bachrach and Baratz (2011), especially, allude to the so-called agenda power consistent with the ability of elites to implement a kind of ordering of priorities of agents invested with legitimate authority, advocating that such minority actors are endowed with the power to include or remove from the governmental agenda matters that are favorable or incompatible with the interests of the group.

However, Dahl (2005) brings a rather expensive binomial to liberal pluralism, which corresponds to the idea of inclusiveness and liberalization, which are respectively related to individual participation and contestability, whose democratic regime of polyarchy emphasizes greater participation popular in the political arena, being the limit of action of the socially, economically and politically less favored strata.

Thus, the aforementioned reading advocates that there are antagonistic spectrums in terms of political regimes, at one end closed hegemony and at the opposite end polyarchy, whose degree of popular participation is when the democratic model is closest to polyarchy, allowing us to presume that the Liberal-pluralist political representativeness alludes precisely to how relevant electoral preferences conform.

In this sense, the perspective of Mills (1981) reinforces the power prerogative of the elites, allowing the establishment of an important relationship consistent with the existence of agents posted in prominent positions in the various types of institutions in the social, political and economic scope, making it compatible with the reading of Schumpeter (1961) capable of asserting leaders capable of persuading the masses in the democratic context.

Bachrach and Baratz (2011) carry out a theoretical critique of traditional liberal pluralism, that is, the political reading is not restricted to the simple ability of the elites to determine the priorities of policies resting on interest groups, on the contrary, the control of social values in the sense of having unwanted reverberations for the mentioned groups is the implicit face of power.

The authors mentioned above, strictly speaking, allow us to perceive that the presence of political groups in power conceives elements compatible with that described by Dahl (2005), where the latter tries to discuss, among other aspects, the circumstantial relationship of the opposition, asserting for the cost whether or not to maintain the opposition and tolerance to this waiver, pointing out the most important traits expected here.

Given the summary discussion of the theoretical elements of democracy, it is necessary to make some considerations about the PBF in different regional terms, that is, studies such as Moraes and Machado

(2017) and Rocha et al. (2018) reveal the importance of Bolsa Família in Brazil to generate favorable repercussions on economic dynamics, particularly in the interrelation of events capable of provoking positive effects towards the increase in employment and income levels.

Emphasizing the above, Bresser-Pereira (2003), Barbosa Filho (2015), and Nassif (2015), especially, point out that government action through the application of economic policies on the natural movement of the economy, strictly speaking, advocates having plausible reverberations in the rhythm of productive activity, generating, through the Keynesian multiplier effect, the initially plausible reinforcement of public sector intervention.

The aforementioned authors, specifically, allow us to underline that government action towards the generation of positive repercussions in the economy, precisely through the generation of employment and income, makes it possible to accept such prerogative at the municipal level, even more so when the frame of reference rests on the northeastern municipal entities. Brazilians are understood by Silva (2009) as fiscally dependent, an aspect compatible with the assumption in this article.

Thus, Silva Filho et al. (2011), Araújo (2017), and Luna et al. (2017) allow us to observe through their empirical tests that there are significant regional differences in the Northeast, admitting that there are distinctions in their collection, quite discrepant degrees in terms of regional fiscal dependence, in addition to substantial heterogeneity in patterns of economic dynamics, converging with the necessary effective participation of the public sector in the local by the policies, mainly social.

Indeed, Ávila (2013) makes some considerations about Bolsa Família, whose concern the author is to highlight elements beyond the objective scope of the policy, even though she accepts that the PBF is the largest Brazilian social policy from the perspective of income transfers, she maintains that there are methodological traits capable of providing certain notes hidden in the official data, expanding the nuances to be admitted.

Therefore, reading the aforementioned author categorically allows constructing variables to the methodological terrain in the sense of trying to capture certain political contexts that can be modeled, however, it is pertinent to bring to the arena of discussions the emphasized elements not so objective and absent from the official banks, as described in the following section of this research.

Thus, the preferences of the agents resulting from the electoral market emphasized in the Schumpeter/Dahl model discussed by Miguel (2005), strictly speaking, allude to the fact that the actors choose the leaders through their subordination to the discourse of the political groups manifested in the Government, in other words, Schumpeter (1961) argues that such leaders can exert influences on the electorate that are not captured by the direct and explicit relationship between the PBF and the votes of the agents in the electoral context.

The meaning of the foregoing, categorically, permeates the attempt to scrutinize that the economic impact caused by the PBF, strictly speaking, is not limited to aspects of income transfers, on the contrary,

the democratic environment resting on a very asymmetric region economically has representatives political traits as prerogatives to explain spatial dynamics.

This study tries to assess how strong the political traces are in the electoral market from a democratic perspective, particularly in the northeastern region, which can influence the pace of economic activity, compared to the relative weight of social transfers present in the PBF as a mere contingent of resources, denoting that it is relevant to relate them quantitatively through the quantile regression model for panel data, according to Marioni et al. (2016).

## **3 METHODOLOGICAL PROCEDURES**

The recently started section, strictly speaking, intends to discuss the methodological procedures main of this study, which summarizes important traits about the variables to be considered, the relationship between both, and the form of econometric measurement. Therefore, the article seeks to carry out an exploratory investigation, admitting a revisitation of theoretical and empirical foundations arising from the literature, as well as the use of sampling that can be measured by the quantile regression method for the data panel.

In this sense, per capita GDP must respond to variations in the Bolsa Família volume per inhabitant, in addition to the acceptance of political factors as proxies capable of providing important influences on the economic dynamics of explicitly asymmetrical municipal federative entities in the Northeast, according to assumptions described in the works by Silva (2009), Silva Filho et al. (2011) and Luna et al. (2017).

More particularly, it is relevant to assert that the first variable of political orientation permeates the rate of the number of votes of the elected mayor before the agents present in the electoral process (VPE), that is, the mentioned proportion seeks to capture whether the choice of the municipal manager it can affect with greater or lesser emphasis the economic impact locally, in compatibility with the competitive electoral model advocated by Schumpeter (1961).

Thus, the methodological explanation is clear because the preferred leaders or political groups for the exercise of power correspond to the voters' tastes, at least momentarily during the municipal elections period, signaling that it is urgent to indicate the profile of the political choices consonant to the different voting theories advocated by the public choice approach described by Borsani (2004).

Add to this, in fact, the proposition of the variable of the Party Coalitions of the Elect Mayor (CPPE), in which it is assumed that there is a dummy as a qualifying variable for the model proposed here, that is, it is admitted to assuming 1 for the municipal manager elected to be from the same coalition or party as the state governor and 0 otherwise, confirming the set of variables to this study.

In this sense, Bachrach and Baratz (2011), among other aspects, make it possible to recover the idea of agenda power, in which such a theoretical premise reveals how significant it is to have a party political connection between the municipal manager and the state administration, since the most important agenda

Convergent tends to occur with ideologically closer party associations present in power in different governmental instances in a Federation, scrutinizing the construction of the dummy variable CPPE.

Add to such notes, as a rule, the northeastern municipal stratification in quantiles, given, peculiarly, the fact that the mentioned entities are quite asymmetric in the population and economic perspectives, being plausible for the quantile regression model for panel data to proceed similarly, in compliance with the empirical tests already carried out in the works by Marioni et al. (2016) and Ferreira and Silva (2017).

After the previous aspects, it becomes preponderant to describe in greater detail the econometric method for this study, whose concern pervades the consideration of the data panel model with quantile regressions, constituting a trio of quantiles to group the municipal entities and reducing the heterogeneity of the units examined in the order of 0.25, 0.50 and 0.75, whose expectation is to capture more forcefully the results of this study.

The quantile regression model, in turn, makes the evidence of the analysis tend to be more robust, probably considering that the instrument considered uses the conditional median as a measure of central tendency, making the estimation more consistent about outliers, which does not occur in Ordinary Least Squares (OLS), where there is only one line around the mean.

Quantile regression for panel data, in particular, is discussed by Marioni et al. (2016). However, initially, there is, as the literature pointed out by the aforementioned authors, the difficulty in estimating a large number of fixed effects in quantiles and considering the problems of incidental parameters when T is reduced.

Subsequently, the Quantile Regression for Panel Data (QRPD) estimator is introduced, which avoids such concerns and the estimates are consistent when T is small, even if T = 2. Furthermore, it allows conditioning of the fixed effects for identification purposes and maintains the unseparated disturbance property of quantile regression models, as opposed to that with additive fixed effects. QRPD allows parameters to be interpreted in the same way as cross-section quantile regression estimates.

The preceding aspects pointed out by Marioni et al. (2016), as a rule, make it possible to highlight the following model:

$$Y_{it} = X_{it}^{'} \beta U_{it}^{*} \qquad \qquad U_{it}^{*} \sim U \tag{1}$$

Where  $X_{it}\beta$  is strictly increasing on  $\tau$ , e  $U_{it}^*$  is the propensity to the outcome, that is, it is a function of the individual fixed effects and the error term. Empirically, the model should be specified as follows:

 $PIBpercapita_{it} = \beta_1(\tau) + \beta_2(\tau) Volume percapita_{it} + \beta_3(\tau) provotos_{it} + \beta_2(\tau) partido_{it} + \varepsilon_{it}$ 

Where PIBpercapita is the GDP per capita of the Northeastern municipalities, Volumepercapita is the per capita volume of Bolsa Família resources destined to municipality I in period t, promotes represents the proportion of votes obtained by the elected mayor over the number of eligible voters voting in the municipality I in period t and party is a dummy, being 1 if the elected mayor is from the governor's coalition or party, 0 otherwise.

The data used in this article correspond to 1784 of the 1794 municipalities located in the Northeast region, disregarding 10 municipal entities, which are removed due to the absence of any data. Information is collected from 3 sources:

A] IBGE Automatic Recovery System (SIDRA) - collected GDP and an estimated population of municipalities;

B] Superior Electoral Court (TSE) - collected the number of eligible voters and the number of votes for the elected mayor, in addition to the party affiliation of the municipal manager in compatibility with the state governor;

C] Brazilian Open Data Portal (PBDA) – collected the Bolsa Família volume by the municipality.

After all, the years of analysis correspond to cuts 2004, 2008, 2012, and 2016, which are linked to the last year of municipal administrations in Brazil, delimiting the temporal scope of the research, constituting the methodological structure of the article as variables to be related in the periods mentioned, the results of which are discussed below.

## 4 COMPORTAMENTO ECONÔMICO MUNICIPAL NORDESTINO DIANTE DO BOLSA FAMÍLIA E ASPECTOS POLÍTICOS

Esta seção, particularmente, pretende tecer alguns comentários relevantes no sentido de discutir os resultados obtidos através do modelo de regressão quantílica para painel de dados, demonstrando quão significativamente as variáveis independentes exercem influências sobre o comportamento do PIB per capita em termos da relação econométrica aqui estabelecida.

Antes, porém, faz-se necessário evidenciar como o PIB, PBF tomados per capita e o VPE variam ao longo dos quadriênios selecionados, em outras palavras, na Tabela 1 é importante utilizar estatísticas descritivas para mensurar acréscimos ou decréscimos distribuídos pelos quantis quanto ao comportamento das variáveis do artigo, fornecendo uma percepção prévia daquilo que se reserva à adoção do método econométrico anteriormente apontado.

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PIB per capita	0.25	0.50	0.75
2008/2004	59,07	56,12	53,98
2012/2008	52,04	50,90	53,32
2016/2012	46,62	42,48	40,05
PBF per capita			
2008/2004	88,09	53,33	34,35
2012/2008	185,44	186,35	188,32
2016/2012	23,52	37,77	54,48
VPE			
2008/2004	1,39	0,74	1,88
2012/2008	-0,39	-0,74	-1,51
2016/2012	-0,00	0,86	-0,17

Table 1 – Variability of GDP, PBF, and EPV between the years 2004, 2008, 2012, and 2016 (in percentages).

Source: Elaborated by the authors based on data from SIDRA/TSE/PBDA (2019).

Based on what is shown in Table 1, it is relevant to consider that the northeastern municipal economy grows per inhabitant on average, starting at the 0.25 quantile and extending to 0.75 at around 52.58%, 49.83% and 49.12% approximately, scrutinizing that the economically smaller entities expand more their rhythms of productive activity compared to those more representative from the point of view of GDP per capita.

About Bolsa Família, the volume of this intergovernmental transfer to Northeastern private agents, by a group of municipalities, increases by an average of 99.02%, 92.48%, and 92.38% respectively, from the lowest to the highest quantile, demonstrating that the less dynamic areas demand with greater emphasis the aforementioned transferred resource, probably being one of the factors with a significant impact on the previously mentioned average growth.

Finally, the EPV expresses a rather fluctuating average variation, that is, the 0.25 quantile is found only from 2004 to 2008 and the subsequent periods are quite unstable; the 0.50 quantile shows an increase from 2012 to 2016, where the previous cuts reveal an increase followed by a fall of equal magnitude; after all, the 0.75 quantile expresses a continuous reduction resulting from an increase, denoting that there are diffuse behaviors in the preferences of the electorate in the Brazilian Northeast.

2 - Evidence on the northeastern municipal economic dynamics for the years 2004, 2008, 2012, and 2016.				
Variables	0.25	0.50	0.75	
Constant	3.1425***	5.5932***	8.4230***	
	(21.28450)	(22.85236)	(28.87170)	
PBF per capita	1.6973e-04***	1.6127e-04***	2.0538e-08***	
	(12.24534)	(5.71034)	(6.46532)	
VPE	0.05464	-0.98523**	-1.63123***	
	(0.21269)	(-2.30601)	(-3.31199)	
CPPE	-0.29419***	-0.48901***	-0.09509	
	(-3.60925)	(-4.55693)	(-0.73551)	

**Source: Elaborated by the authors based on data from SIDRA/TSE/PBDA (2019). Note: (i)** T value in relatives; \*\*\* p<0,01; \*\* p<0,05; \* p<0,1;

With the results of Table 2 posted above, it is important to consider the impact of Bolsa Família per inhabitant on GDP per capita, reserving for the second moment to point out the examination of the restful political reverberations in the northeastern municipal economy, structuring such a discussion by economic and later political spectrum, meeting expectations in the study.

Under these circumstances, the PBF per capita exerts positive impacts on the GDP per inhabitant in the municipalities of the Brazilian Northeast, where an increase of 1.00 Real in Bolsa Família produces increments of 1.70, 1.61 and 2.05 Reais, approximately, in the municipal courts of those economically small entities until reaching the governmental spheres with more representative economic strength, denoting that there are important reverberations of the PBF per capita in the dynamization of the northeastern municipal economies.

Thus, Moraes and Machado (2017) and Rocha et al. (2018) make it possible to verify that the PBF tends to have a positive impact on the economic dynamics of any spatial portion, as attested in the results of the quantile regression model for the data panel, whose perception denotes that in empirical terms there are favorable repercussions on the municipal federative entities northeastern along the analyzed temporal cuts.

From the point of view of the trio of quantiles observed, the one with the most economically representative municipalities shows the impact of the PBF with greater significance, demonstrating that there is a situation in which municipal entities appointed as holders of accentuated aggregate income patterns amplify cyclically plausible effects, in agreement with Bresser -Pereira (2003), Barbosa Filho (2015) and Nassif (2015).

The aforementioned authors argue in economic analysis, as a rule, that an increase in circulating income through expansion of public spending resulting from government transfers to private agents acts as an activist fiscal policy capable of favoring increased consumption population of any area, underlining a virtuous cycle regionally in Northeast Brazil, similar to the empirical tests by Silva Filho et al. (2011) and Luna et al. (2017).

Ávila (2013) allows us to assume, specifically, that Bolsa Família translates nuances capable of revealing details that are not so apparent, that is, the highest quantile in presenting a more forceful impact it advocates assessing the relevance of social transfer able to describe quite asymmetrical spatial traits from the perspective of Araújo (2017), that is, the economically more robust municipalities gather large low-income population portions, with the PBF being significant for the dynamization of these northeastern economies.

It should be noted, however, that Fraser (2009) discusses the influences of neoliberalism on the labor market, especially from a gender perspective, demonstrating that the egalitarian vision as a legitimate ideology has been losing force, notably in the context of the last quarter of the twentieth century up to the present, whose asymmetric jobs in terms of gender fall on those classes or groups involved, probably, as

beneficiaries of the PBF and aggregators of aggregate consumption in the most economically dynamic areas.

The VPE, however, categorically points out that the observed quantiles reveal distinct repercussions on the pace of economic activity in terms of per capita GDP, that is, the 0.25 quantile demonstrates a positive impact and the other negative ones, where the unitary increase in votes by voters in the An elected mayor causes variations in the product of the northeastern municipal economy of around 0.05, 0.98 and 1.63 Reais approximately, conforming a drop in the last quantiles and a smooth expansion in the group of smaller entities economically.

However, from a statistical point of view, the 0.25 quantile does not demonstrate the significance and, consequently, that perspective of the positive impact of the VPE loses explanatory power, emphasizing that the fact that the agents' choices as preferences for a given municipal manager do not influence in the rhythm of the local economy, being plausible to admit, only, the unfavorable occurrence of the relation of the option of the electoral market, in the reading of Schumpeter (1961), and the GDP per capita.

To this end, Gomes and Mac Dowell (2000) show that after the Federal Constitution of 1988, as a rule, a representative number of municipalities are created and, consequently, the economic fragility in the sense of flagrant fiscal dependence of the mentioned entities is visibly expressed, denoting the emergence of local government instances resulting from political articulations, explaining with certain robustness the reasons why small municipalities generate results compatible with that presented by the model considered here.

The meaning of this, strictly speaking, advocates realizing that the smaller the municipal entity, the negative effects tend to decrease in terms of the influence of the college of voters on economic activity because with a smaller population, categorically, the allocation of labor their is less conflict in the sense of competition in the labor market and, probably, the absorption of agents as workers should permeate the increase in civil service.

Thus, Silva (2009) makes it possible to recover, at least tendentially, the understanding that there is a decreasing marginal productivity of civil servants, that is, as municipal entities gravitate between the previously observed quantiles there is a relative drop in productivity local economy, hence the behavior of the GDP per inhabitant is described concerning the EPV in the way obtained by the model admitted here.

After all, when analyzing the impact of the CPPE on GDP per capita, it is important to mention that a dummy qualification is indicated, where the municipal manager if affiliated to the state governor's party or coalition, assumes 1 and 0 otherwise. The results show that the 0.75 quantile does not present statistical significance, reserving to the other quantiles an increasing significance from 0.25 to 0.50, whose group of intermediary entities denotes a more expressive influence of the emphasized variable in face of the pace of local economies.

It should be noted, specifically, that the economically small and medium-sized municipalities show a drop in per capita GDP when there is a party coalition between the local and state managers, demonstrating

that political articulations bring implausible repercussions to the natural flow of the market economy, in other words, the intervention of political aspects in the economy generate negative results, admitting the findings of this research and the theoretical deferences.

Reinforcing this comment, Bobbio (1986) allows us to assert, at least in understanding the emphasized democratic perspective, that the conservation of individual freedoms is fundamental, whose persuasive corollaries of leadership resting on the masses, categorically, do not accentuate pertinent nuances in terms of economic gains and yes, probably, the party-related political traces underline the worsening of local productive activities in the Northeast.

By rescuing Lopreato (2007) and Bachrach and Baratz (2011), it is necessary to mention that the so-called agenda power so significant for public management, strictly speaking, does not represent greater reverberations in the perspective of economic gains measured in GDP per capita, because the negative CPPE results signal, peculiarly, a municipal agenda that is incompatible with the articulations with the state government, demonstrating an agenda of pretensions that are not relevant to the set of entities analyzed here.

Thus, it is appropriate to emphasize that in the discussion pointed out in the study, what is clear stems from the political presence measured in the variables EPV and CPPE with important inconsistencies, that is, both perceptions from a democratic institutional environment do not accentuate economic impacts capable of raising income and consumption levels, showing a tendency towards inefficiency of the public sector not in the application of resources but in rather implausible political articulations, denoting being the most flagrant feature of this article and allowing the acceptance of the research hypothesis in these pages.

## **5 FINAL CONSIDERATIONS**

Having carried out this study, which aimed to analyze the behavior of the municipal economic dynamics in the Brazilian Northeast region manifested in the GDP per capita with the PBF per inhabitant, EPV and CPPE, in the years 2004, 2008, 2012, and 2016, demonstrated certain traits symptomatic during this research.

It was evident that Bolsa Família produced plausible effects on the pace of economic activity in the different municipal groups in the Northeast, saving more significant increases in aggregate income for those most economically representative, probably this aspect indicated a shock in the consumption of the families posted on the outskirts of larger areas and, at the same time, impacts on the labor market itself.

Under these circumstances, an extrapolation of the scope of the article was clearly due to the increase in the demands of the labor supply in the perspective of demanding higher wages and the tendency to reduce underemployment, explaining the reasons why there were readjustments in terms of the increase in per capita GDP of the 0.75 quantile having been higher and, consequently, having relevant changes after the entry into the Bolsa Família Program.

The political variables, categorically, demonstrated implausible nuances about the pace of northeastern municipal economic activity, that is, the rate of Votes for the Mayor-Elect only showed positive repercussions when there was no statistical significance, reserving significant negative impacts for the quantiles, whose explanation pervaded by the political articulations that are so unfavorable in the sense of obtaining efficiency in the public service, possibly, notably less skilled civil servants, according to the acceptance of the concept of diminishing marginal productivity of civil service.

In addition, the fact that party political alliances with the state governor, similarly, did not provide relevant influences on the GDP per capita of the northeastern municipality, on the contrary, a reduction in economic productivity was observed, supposedly, the reasons should converge to what was observed with the idea of VPE, accentuating economically inefficient nuances coming from the political sphere in the democratic environment.

Indeed, the democratic theoretical model stemming from liberal-pluralism, signaled that the northeastern municipal leaders did not produce economically, politically, and socially plausible traits, since the observed relationship pointed to a worsening when admitting the political variables, whose peculiarity, probably, pointed out problems in the form of political articulation always tied to the interests of small groups, safeguarding for social actors fully reduced portions of a social product based on exacerbated inequality between leaders and masses.

Therefore, acceptance of the article's hypothesis, as a rule, advocated numerous possibilities for future work, such as the expansion of economic variables related to those of a political nature, expansion of the set of municipalities, and the consideration of the complete time series of the municipal administrations examined, making up traits not admitted in the research and that would be covered with pertinent minutiae not discussed in the now completed investigation.

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